AMENDMENT UNDER 37 C.F.R § 1.116
U.S. Appln. No.: 09/882,018
Attorney Docket No.: Q64966

REMARKS

Claims 1-5 are all of the pending claims. Claim 1 is the only independent claim.

Drawings

The Examiner has objected to the drawings as failing to comply with 37 CFR 1.84(p)(5) because they include the reference sign "HOS_{15}" which is not in the specification. As such, Applicants has provided a Replacement Sheet in which the reference sign "HOS_5" is used in Fig. 3. In view of this amendment, Applicant respectfully requests that the Examiner withdraw the drawing objection.

Claim Objections

The Examiner has objected to Claim 5 because the variable "t" (used on line 2) and the variable "t_i" (used on line 3) appear to both relate to a traffic value. As such, Applicant has amended claim 5 and respectfully requests that the Examiner withdraw the objection to the claims.

Claim Rejections - 35 U.S.C. § 102

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Vasudevan et al. (US 6,539,221). Applicant respectfully traverses this rejection.

With respect to independent claim 1, Applicant respectfully request that the Examiner withdraw the rejection at least because Vasuden does not teach all of the recitations of claim 1. For example, Vasudevan does not teach the claimed method of constructing a representation of

the geographical distribution of traffic for a cellular radio network including dividing each cell of said cellular network into a set of areas using information on handovers obtained from said cellular network, determining a traffic value for each of said areas, and determining a representation of the geographical distribution of the traffic from said traffic values.

According to the rejection, it appears to be the Examiner's position that Vasudevan's sectors of bins correspond to the claimed "set of areas." *See* Office Action dated July 8, 2004 at page 6 (Response to Arguments Section). However, as is discussed below, neither Vasudevan's bins nor Vasudevan's sectors correspond to the recited areas.

Bins

In Vasudevan's wireless network, the a cells are divided into "bins" of a fixed size. For example, these bins can be 100m x 100m. *See* (for example) Vasudevan at Fig. 3. The bins are then classified based on several factors, including handovers boundaries (*See* Vasudevan at 3:11-29) and traffic (*See* Vasudevan at 4:32-53).

However, the cell is not divided into bins using the handover information. Instead, the cell is first divided into the bins, and then bins are classified based in part on handover information. As such, Vasudevan's "bins" cannot correspond to the recited "areas."

Sectors

Moreover, although Vasudevan discloses that the cell is divided into sectors, there is no disclosure that the cell is divided into sectors using information on handovers.

Also, Vasudevan's reduced "sectors" (after cell-splitting) cannot correspond to the recited "areas" at least because the determination of the geographical distribution of traffic *is not based on the traffic values of the adjusted sectors*.

As shown in, for example, Figs. 23a-c of Vasudevan, the size of a cell can be reduced by reducing the transmitting power of a Base Transceiver Station ("BTS"). Vasuden calls this reduction of an existing cell size "cell-splitting." In cell-splitting, the transmitted power of a cell site is reduced in order to reduce the traffic of that cell site. *See* Vasudevan at 9:8-17. By reducing the transmitted power, the cell size can be reduced until the cell traffic of the cell is below a maximum traffic threshold value. How much of a reduction of the cell transmission power, and as such cell size, needed to reduce the cell traffic below the threshold value are calculated based on traffic information determined based on a precise *bin-to-bin* mobility estimation algorithm. *See* Vasudevan at 7:19-37.

Although the size of the cell can also be reduced on a sector basis (for example, in Fig. 23c the size of one of the three sectors is reduced), the reduced "sectors" cannot correspond to the recited "areas" at least because the determination of geographical distribution of traffic *is not based on the traffic values of the reduced sectors*. Instead, the distribution of traffic has already been determined based on the geographical distribution of traffic values of the bins. The reduced "sectors" are merely the *result* of the precise geographical distribution of the traffic values of the bins.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of independent claim 1 at least because neither Vasudevan's "bins" nor Vasudevan's "sectors" can correspond to the recited set of areas. Furthermore, Applicant respectfully requests that the Examiner withdraw the rejection of dependent claims 2-5 at least because of their dependency from claim 1.

Moreover, with respect to dependent claim 4, Vasudevan does not disclose that claimed method in which outgoing handover boundaries form the boundaries of the areas. For example, the boundaries of Vasudevan's bins are fixed, and there is no disclosure that the boundaries of Vasudevan's sectors are outgoing handover boundaries.

Finally, if the Examiner wishes to maintain any of the rejections, Applicant respectfully requests the Examiner to point out which *features* in Vasudevan's wireless network correspond to each of the recitations of the claims instead of merely providing general citations to various parts of Vasudevan's text and Figures.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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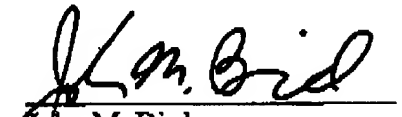
The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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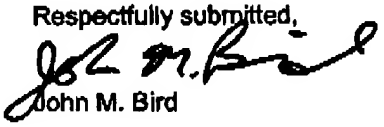
CERTIFICATION OF FACSIMILE TRANSMISSION

Sir:

I hereby certify that the above identified correspondence is being facsimile transmitted to Examiner Willie J. Daniel, Jr. at the Patent and Trademark Office on October 8, 2004 at (703) 872-9306.

Respectfully submitted,



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